

## PATENT ABSTRACTS OF JAPAN

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### (54) OLEFIN-BASED BLOCK COPOLYMER

#### (57)Abstract:

PROBLEM TO BE SOLVED: To obtain a new block copolymer i.e., a modification material for maintaining balanced properties in rigidity and impulsive resistance at a high level, wherein a polyethylene-based segment with a high melting point and an elastomer segment with Tg of not higher than -50°C are bonded.

SOLUTION: The olefin-based block copolymer is a copolymer of ethylene and a 3-20C  $\alpha$ -olefin and shows a peak ascribable to a  $\beta\beta$ methylene in its <sup>13</sup>C-NMR spectrum. The copolymer also exhibits a glass transition temperature(Tg) of not higher than -50°C measured by differential scanning calorimetry (DSC), a heat absorption peak ascribable to the melting point (Tm) at a temperature not lower than 105°C, a melting heat not lower than 20 J/g estimated from the melting peak area, a density of not less than 0.870 g/cm<sup>3</sup>, and a melt flow rate in the range of 0.3-50 g/10 minutes at 190°C under 2.16 kg loading.